

**SYSTEM AND METHOD FOR WIRELESS  
VOICE AND COMPUTER COMMUNICATIONS**

Abstract of the Disclosure

A system and method for wireless voice and computer communications sample voice data from an audio input or telephone line, convert the sampled data with a codec and audio engine to compressed, digital samples, generate RF signals representing the digital samples with a wireless modem, transmit and receive RF frames including such RF signals with a radio transceiver, decompress digital samples with the audio engine, convert the digital samples to analog with the codec and output analog audio signals.

5                  The system and method also receive bitstream data from a computer with a communication port or from a telephone line with a modem, generate RF signals representing the bitstream data with the wireless modem, transmit and receive with the radio transceiver RF frames including RF signals representing bitstream data, and output to a computer or telephone line bitstream data. The system and method use a frame format protocol to transmit a plurality of RF frames representing bitstream data during a time period when no RF frames are received, and to receive a plurality of RF frames representing bitstream data during a time period when no RF frames are transmitted. The system and method dynamically or by command adjust the frame format protocol to increase or reduce the number of RF frames representing bitstream data that are transmitted or received during a time period in which, respectively, no RF frames are received or transmitted.

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